

## JFF... (Just For Fun)

### IT Support That's Just Right!

At IT Radix, we believe in fun. That's one reason we distribute these newsletters. They are meant to be engaging, interesting, informative and fun. As you can see, the theme for our newsletters during the first quarter of 2015 is "Just For Fun!"

IT Radix also believes in doing the right things that fit our clients' needs and doing them well. Just as Goldilocks found the perfect porridge, chair and bed, we want our clients to find what we do for them to be "just right." That's one reason we write all this content ourselves too. We want you to know that what you read in our newsletters is customized for you, our readers, just as each of our work projects is customized for each of our clients.

We take this customized, "just right" approach from the beginning with each client. Our typical first client meeting is our free assessment of their computer network. It is not only a technical inventory but also an important exercise in questioning and listening deeply to the answers. Answers tell us how each prospective client approaches their business, how they rely on technology today and how they might rely on and/or benefit from technology solutions in the future. Back at our office, the IT Radix team then discusses the technical and business aspects of the assessment and puts together a customized proposal "just right" for that organization. Each proposal offers options to the client, such as our three IT Management and Support Plans. Each plan offers something different to fit client needs. We help the client identify the plan that is "just right" for them.

All through a project, the customized approach continues. It starts with a face-to-face or phone meeting outlining all the steps and determining optimal ways to complete a project causing minimal disruption to ongoing business. Once a project is complete, we continue to ask questions and follow up to be sure that what we have implemented meets their needs. We never want there to be even a hint of buyer's remorse or unhappiness with any of our clients. We want to hear about issues and make it right..."just right!"



"Someone's been messing around at my work station, too!"

Some other IT firms put clients in a box. Clients must use only specific hardware or software, or buy a specific package of services. Not so at IT Radix. We will not dictate the terms of the relationship; just like Goldilocks, the client gets to choose!

If IT Radix were selling mattresses to the "three bears," each bear would have purchased the mattress that was "just right" for each of them because we listened to each of their needs and provided them with the right solution. Just like we do with all our clients!



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## Introducing...Joe Caravaglia

All work and no play makes for a very boring day! At IT Radix, we pride ourselves in having a relaxed work environment where staff members can joke around and still get quality work done. We're a fun group of people who truly enjoy the comradery and partnership we have working together. That's important when you realize that 33% of your day is spent at your workplace!

All kidding aside, we are happy to have **Joe Caravaglia**, IT Radix Service Consultant, on our team. Joe manages our Professional Service board and works closely with our technician team to ensure clients' issues are resolved completely and in a timely manner. Joe's all-around good nature, dedication and willingness to jump in and help wherever needed are key strengths he brings to our team. With over 10 years of project management experience, Joe's perseverance and follow through are second to none. Affectionately known as Mr. Fantastic because of his love of life, Joe is an all around fun guy to work with!

When not at the office, Joe enjoys dabbling in construction. His current project is rehabbing a house in Totowa that he totally gutted and brought down to its bare studs. He also enjoys tinkering on one of his five cars. Yep, three he classifies as "daily drivers" while the other two are just for fun: 1952 Chevy Styleline Deluxe and 1967 Pontiac Lemans. Both hobbies are a true labor of love!

Joe was born and raised in Morristown where he still resides with his family today. A self-proclaimed "family man," Joe grew up in a large family—having six brothers and sisters! Practically raising his two younger brothers, Joe has fond memories of taking them on weekly trips to the movie theater to watch the latest release. Joe confesses to having a serious popcorn addiction and recently purchased a HUGE movie theatre style popcorn maker that barely fits on the counter. In his words, "it's fantastic!"

Joe's personal philosophy: Perseverance and dedication are some of the most important qualities to have!

"A man is wise with the wisdom of his time only, and ignorant with its ignorance."

– Henry David Thoreau

## Welcome!

A warm welcome to our newest **Managed Service** Clients:

*Ameridia, Div. of Eurodia Industries  
Dessau International  
Fabiano Designs International  
Madison Management Services LLC  
Park Piedmont Advisors LLC*

Remember, **IT Radix** is here to service all of your technology needs!

## The Power of Reboot!

Never underestimate the power of a reboot! Quite often when we get calls from our clients having issues, through the course of troubleshooting we find that they have not rebooted their PC in days or even weeks. If we had a nickel for every time a simple reboot solved the problem, we'd be millionaires! Simply rebooting restarts a lot of hidden services which your computer relies on. Amazingly, a large percentage of errors are resolved by simply rebooting.

Don't be prehistoric...check out our **BLOG** for more troubleshooting tips that can help you resolve common computer problems!



"When it falls down like that, you just reboot it."

**OUR CLIENTS  
SPEAK OUT:**

## DON'T WORRY, BE HAPPY

"There is no longer a need to worry about the stability of our IT system. IT Radix shoulders that burden now."

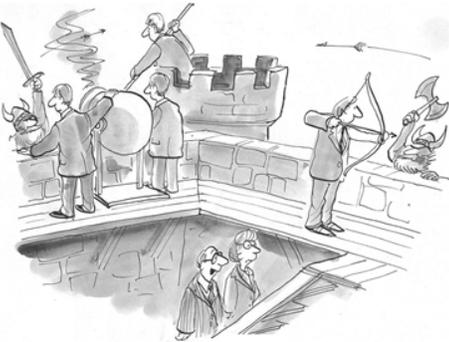
Sarah Krom — Sharpe, Kawam, Carmosino & Company, LLC

## Wall of Protection

Hear ye! Hear ye! If firewalls don't protect your content, what *do* they protect?

Let's pretend you have a castle with numerous villagers living inside. It is defenseless to invaders that are looking to conquest. As the king, what would you do? You would build a wall of protection, of course! Sure your wall doesn't protect each villager individually, but the wall protects your castle as a whole. Invaders are much less likely to get through, and you can feel safe.

Similarly, your computer is the castle and your firewall is the wall—keeping most of your conquistadors at bay. Be forewarned, some invaders (i.e., viruses and scammers) cloak their identity and try coming in through the front gate.



"Our firewall barely protects our content."

Proudly folded & stuffed by Park Lake School

## SPECIAL OFFER

### Fun Technology

Sign up for a year of IT Radix Managed Services during the months of **January, February** and **March**, and receive a Kindle Fire!

All three plans are eligible:  
**Capstone, Cornerstone, Keystone**

Visit [www.it-radix.com](http://www.it-radix.com) to learn more about what's included in each of these proactive maintenance plans. Call **IT Radix** today to learn more!

## When Wi-Fi Collides

These days the Internet is everywhere. Wireless hotspots abound at Starbuck's, McDonald's, and libraries. ISP's like Cablevision, Comcast and Verizon are adding hotspots every day for their clients. Everyone I know has Wi-Fi in their house. It's hard to go anywhere with your laptop or tablet and not have Wi-Fi access. All this access must be good right? More online access = more Candy Crush. Well...here's the thing. All the Wi-Fi routers and access points out there are actually causing a problem—wireless congestion. You see, there is only so much Wi-Fi bandwidth to go around and the more wireless networks there are within range of you, the slower each of them will go.



"Wait a week, then tell him we don't need 'receptors' for wireless."

Traditional wireless uses the 2.4GHz frequency band for operation. It gets divided up into 13 separate channels. The issue is those 13 channels all overlap each other. I like to think of it this way: Imagine a 13-lane super highway. A highway that wide should be able to move a lot of cars. Even if you have those slowpokes hogging the left lane, there are still 12 more lanes to move all those cars along at breakneck speeds. So what's the rub? Well, our 13-lane Wi-Fi highway is only 4 lanes wide. That's what 13 overlapping channels are like. So in reality, there are only 3 channels available that don't overlap any other channel and that is where you will find all of those Wi-Fi hotspots that everyone loves. Starting to get the picture? Try this, take your laptop into a crowded office building and take a look at the number of available Wi-Fi networks. How many do you see? 10? 20? 50? However many you see remember they are all sharing 3 "lanes" worth of bandwidth.

OK, I hear all you techies out there saying "What about 5 GHz?" Yes it is true, there is a second radio frequency available for Wi-Fi networks, the 5 GHz band. It offers more channels and higher speeds. And it doesn't share its frequency with the likes of baby monitors, cordless phones and microwaves. But, everything comes with a price. While the higher frequencies do offer faster speeds, this comes at the cost of range. Higher frequency radio signals just can't travel as far. Higher frequencies also have more trouble getting through solid objects like walls. Anyone remember AM radio (the much lower frequency cousin to FM)? Sounded terrible right? It may have sounded bad but I was once able to listen to a Met's game broadcast on a NY AM radio station while I was doing some work in Ohio. Lower frequency = greater distance. Even with the 23 non-overlapping channels offered by 5GHz we still have an issue with wireless congestion. There are just too many devices out there vying for a piece of the wireless highway.

Unless you're a big company and have your own building far away from other wireless networks, then wireless congestion will affect you and your business. I don't mean to paint a dismal picture of wireless technology, but I do think businesses need to have some realistic expectations of what they can and cannot do with a wireless network. As congested as the airwaves have become in some areas, it's getting difficult to be fully productive while wireless. So what does all of this mean to you? The bottom line is with current Wi-Fi technology, a wireless connection is never really going to be as fast or as stable as a wired connection. In most office spaces, being 100% wireless generally will not result in a pleasant user experience. Most businesses should stick with a traditional wired network for most of their connections. Wireless is fine when you need to take your tablet to the conference room for a quick meeting, but when you return to your desk there should be a rock-solid, wired connection waiting for you there!

“A day without laughter  
is a day wasted.”  
— Charlie Chaplin

## Just for Laughs!



“According to my research, laughter is the best medicine, giggling is good for mild infections, chucking works for minor cuts and bruises, and snickering only makes things worse.”

### Just Plain Punny



- **Confucius say:** Man who run in front of car get tired.
- A library should have several floors because it is a multi-story building.
- **Confucius say:** He who sneezes without a handkerchief takes matters into his own hands.
- The general started bowling before his aide had entered his name on the score sheet. He had launched a preemptive strike.
- **Confucius say:** Men who leap off cliffs often jump to conclusions.

**From the desk of:** Cathy Coloff  
**Subject:** Let’s start the new year right...



...with a little bit of fun mixed in with your technical education. I believe that many people find technology to be dry, intimidating or sometimes boring. So, I love this quarter’s newsletter with its emphasis on fun. In fact, having fun and being positive is one of our core values at IT Radix. It’s with great pride that I say our team is a great group of people to work with—we work hard, we take our client’s IT very seriously, but we still have fun. So, as you read this newsletter, skim our Facebook or LinkedIn posts, or check out our blogs, I hope you’ll always appreciate the little bit of fun or humor that we mix in.

On a related topic, I’ve been asked why I always use a caricature for my “headshot” and it’s simple—it makes me smile, and it is fun. One of our employees asked in his interview when he would get his caricature—while we didn’t hire him on the spot, it sure did reveal a positive personality. Then there’s Mike Oster who claims his caricature is a photo because he actually does look like a cartoon character. Now, anyone who knows Mike knows that he is a smart “IT” cookie, but he’s not afraid to poke fun of himself, and that’s what the caricatures are about. Not taking ourselves too seriously and worrying about our image but rather getting down to it, doing our job and loving what we do is what we’re all about. Let’s face it, if you don’t enjoy your work, it’s no fun getting up to go to work every day and I, for one, want to enjoy what I do.

So, if you haven’t already, make sure to put a little fun in your schedule and let us worry about your IT. Happy New Year!

## What is a Zettabyte?

Perhaps you saw the recent movie version of Jack and the Beanstalk? Well, data has become like the beanstalk and literally shot up overnight. Ninety percent of the data that exists in the world was generated in the past two years and sooner than we think zettabytes (ZB) may become the norm. In fact, overall data is projected to be 35 ZB by the year 2020 (it’s currently 0.8 ZB)...I’ll come back to the definition of a zettabyte in a minute.



“I threw out two small thumb drives last night ... and the beanstalk was there this morning.”

You may wonder what’s causing this data explosion. Well...it’s a variety of sources including: increased access to broadband (fast) Internet, the growth of mobile users, video surveillance, medical imaging, smart devices, and non-traditional IT devices such as RFO readers, navigation systems, etc.

But what’s one to do with all this data? Of course, the first step is to store it, which results in a storage squeeze. Small-to-medium businesses in particular are becoming overwhelmed. The answer is to divide and conquer using archiving, virtualized storage and more. Once the data is stored, it needs to be easily managed and accessible. More and more cost-effective data management solutions are becoming available every day. Check with us to learn more.

So, what’s a zettabyte? It’s 1,000,000,000,000 gigabytes (in other words, a lot). A terabyte is 1,000 gigabytes. What comes after a terabyte, why a petabyte of course? Next comes an exabyte and finally we come to a zettabyte. To help put it into perspective, one terabyte holds the equivalent of roughly 210 DVDs and it took roughly 1 petabyte of local storage to render the 3D CGI effects in Avatar. They estimate the information content of all human knowledge is only 12 exabytes. I’m not sure even Jack can save us from the zettabytes of information, but who knows!